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# (12) UK Patent Application (19) GB (11) 2 244 798 (13) A

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U1S S1198

(56) Documents cited

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(58) Field of search

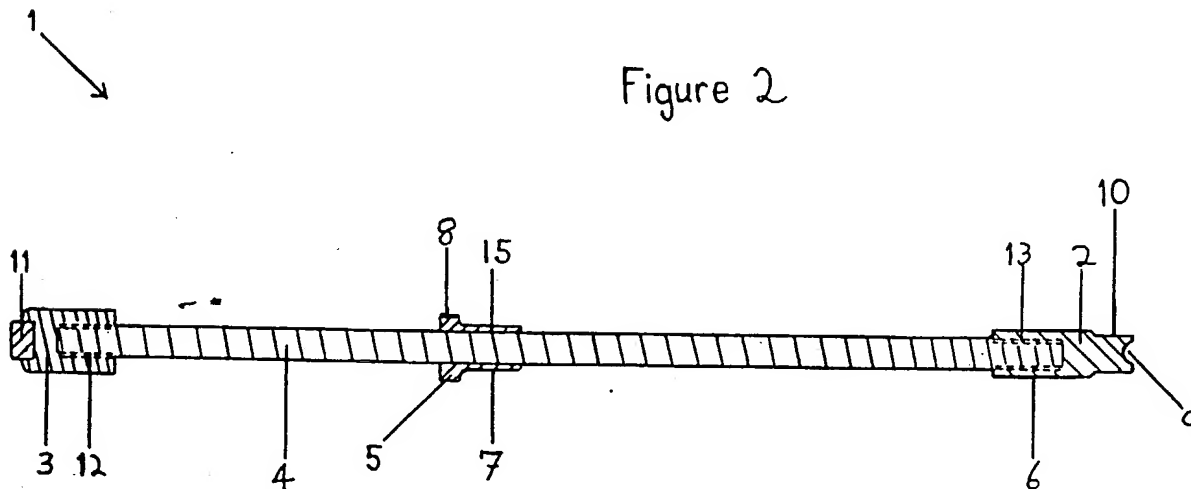
UK CL (Edition K) F3C CPP CPX CRC CRF CRG

CRH CSN

INT CL<sup>5</sup> F41A, F41C**(54) Jammed bullet remover**

(57) This device is for removing a bullet in a breach loading hand gun where the bullet from the fired cartridge has failed to leave the barrel.

The device is inserted into the muzzle end of the barrel where it aligns itself to the axis of the barrel, with minimal surface area contact with the rifling of the barrel, by means of ram 2 and slidable collar 5. With the aid of a mallet applied to head 3 via shock absorber 11 the device drives the bullet to the breach where it can be removed without damage or contamination to the barrel.



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1 →

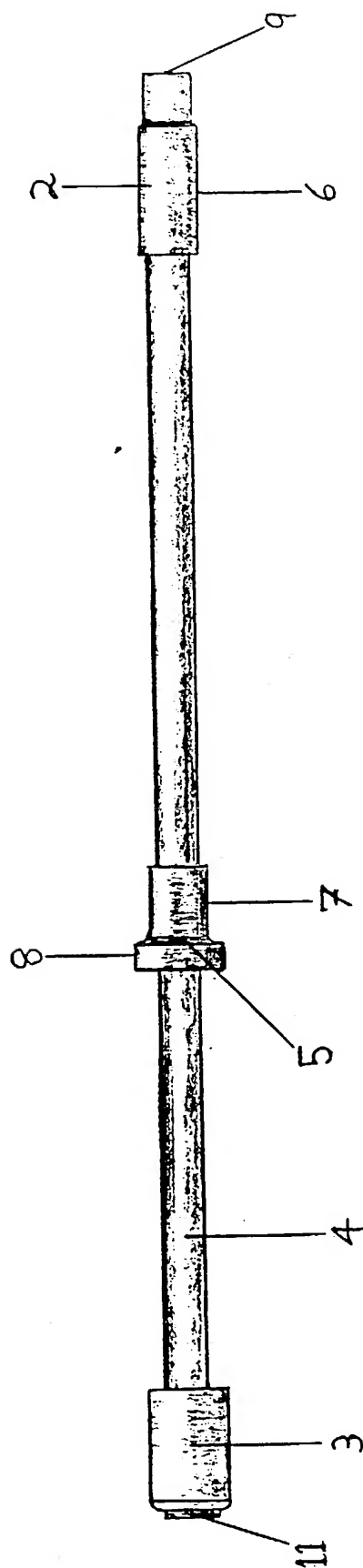


Figure 1

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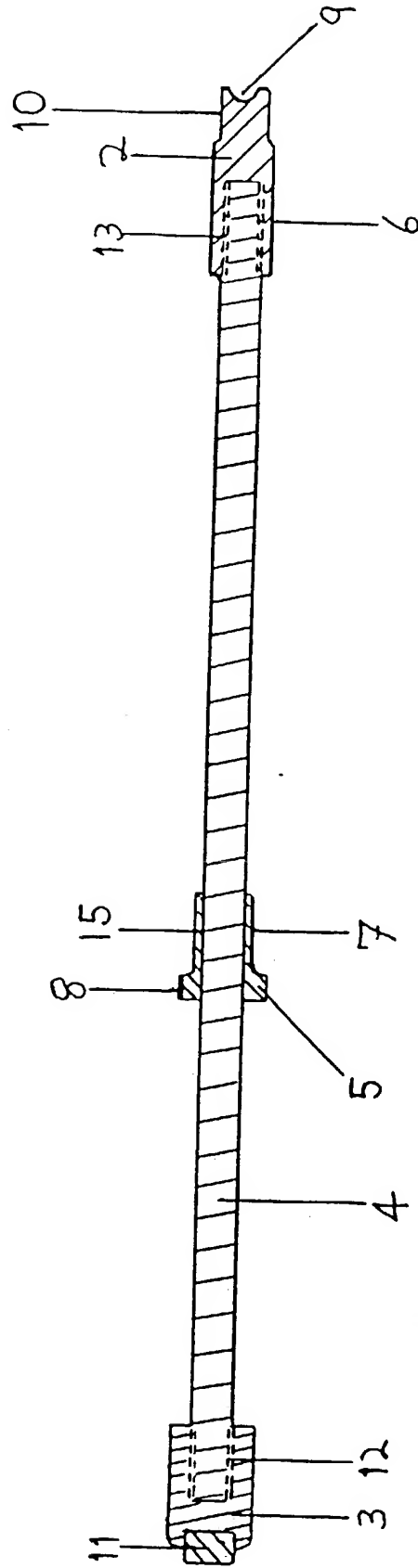


Figure 2

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## DEVICE FOR CLEARING JAMMED BULLETS FROM GUN BARRELS

## INTRODUCTION

It sometimes happens that when a handgun, for example a pistol or rifle, is fired, the bullet does not leave the gun barrel. This can be due to there being insufficient charge in the cartridge with a resultant lack of gas pressure. It can also be due to the calibre of bullet being fired from the gun, being oversize. Either situation can result in a bullet being jammed in the gun barrel. The gun is accordingly unusable until the jammed bullet has been removed.

The present inventive device gives a means by which any bullet jammed in the barrel of a hand gun can be quickly and easily removed in the field by the operator, with no special equipment beyond the device and a mallet or block of wood. Moreover the device is so engineered that no damage to the gun barrel results from its use.

The inventive device is not intended for use in cases where more than one bullet is jammed in a gun barrel or where the barrel has been made to bulge as a result of the jamming. Components for the Jammed Bullet Remover can be proportioned to suit most guns.

The advantage which the inventive device offers over present art consists in its providing a simple and practical method of removing bullets jammed in a gun barrel without resort to old screwdrivers, knitting needles, and other makeshifts likely to cause damage to the gun barrel. The device is light, compact, and sturdy enough to be carried in the field and is easy to use. It also requires no maintenance.

The drawings and description that follow give a full account of the preferred embodiment of the present invention. The scope of the invention is in no way delimited by the specifications given in this description but only by the claims which will follow it.

## BRIEF DESCRIPTION OF THE DRAWINGS

1. Figure 1 shows the inventive device complete and ready to use.
2. Figure 2 shows the inventive device in cross section, revealing its internal structural details.

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## DESCRIPTION OF THE PREFERRED EMBODIMENT OF THE JAMMED BULLET REMOVER

Figure 1 shows the Jammed Bullet Remover 1 as complete and fully assembled. Once assembled, said Jammed Bullet Remover 1 is not intended to be disassembled.

Referring to Figure 2, Jammed Bullet Remover 1 is shown in axial cross section. The Jammed Bullet Remover 1 is assembled by first sliding Collar 5 via Axial Passage 15 onto Shaft 4. The diameter of Axial Passage 15 is chosen so that Collar 5 slips axially along Shaft 4 but with no non-axial movements. Shaft 4 is then joined rigidly to Ram 2 and to Head 3 via Threaded Connections 12 and 13 respectively. Threaded Connections 12 and 13 are screwed down under load so they cannot be unscrewed by hand or by accidental forces but only through the use of machining equipment. Accordingly, Threaded Connections 12 and 13 serve to join Ram 2 and Head 5 permanently to Shaft 4. This having been done, Jammed Bullet Remover 1 is fully assembled.

Ram 2 and Collar 5 are the only parts of the Jammed Bullet Remover 1 which come in contact with the gun barrel. Each is made of brass to ensure that the gun barrel is not scratched or otherwise damaged when the device is used.

An embodiment of Jammed Bullet Remover 1 can be used in any gun with a barrel whose inside diameter is such that Ram 2 and Collar 5 can be fitted into the barrel along Ram Shoulder 6 and Collar Shoulder 7, the diameters of which are equal and chosen so that they fit with fine tolerance into the gun barrel and can only be moved coaxially within it. The diameter of Collar Shoulder 8 is chosen so that it significantly exceeds the the inside diameter of the gun barrel. This prevents Collar 5 from slipping into the gun barrel. Collar 5 assures that Shaft 4 will be precisely and coaxially aligned in the gun barrel so that Ram 2 stays precisely coaxially aligned as well. Indentation 9 on Ram Extension 10 is shaped to catch the end of the jammed bullet when the bullet's nose has a taper of some sort. Indentation 9 helps to realign the bullet before it is expelled from the gun barrel, making for maximum ease of removal. Shaft 4 is chosen to be long enough to ensure that Ram 2 can reach any point of the gun barrel without forcing Head 3 into contact with Collar 5.

The procedure for the use of Jammed Bullet Remover 1 can now be described. Ram 2 and Shaft 4 are inserted into the muzzle end of the gun barrel and pushed down the barrel until it is possible to fit Collar Shoulder 7 into the muzzle end of the gun barrel as well. Ram 2 and Shaft 4 are then pushed down the gun barrel until Ram Extension 9 makes contact with the bullet to be removed. The gun user then takes a mallet or piece of wood and delivers an impact to Head 3 via Shock Absorber 11. Shock Absorber 11 is made

of hard nylon and has the function of preventing the deformation of Head 3 while still transmitting the necessary impact force in the case where a metal hammer or other hard object is used, a mallet or piece of wood not being at hand. Impact force is transmitted from Head 3 down Shaft 4 to Ram 2 where it is transmitted to the jammed bullet. The force delivered to the jammed bullet via Ram 2 has the effect of moving the bullet down the gun barrel towards the breach of the gun or the cylinder, where it can be removed by hand. Indentation 9 on the end of Ram Extension 10 has the effect of realigning the bullet when its nose has a taper, so that it travels easily down the gun barrel and does not have a chance to jam again. The once-jammed bullet is then removed from the breach of the gun by hand, once it has been pushed out of the gun barrel. The Jammed Bullet Remover 1 is then lifted out of the gun barrel, completing the procedure.

This completes the description of the construction of the preferred embodiment of the inventive device and the procedure for the use. The scope of the present invention is in no way delimited by the above specifications of the preferred embodiment, but only by the claims which follow.

## CLAIMS

1. A device to remove jammed bullets from gun barrels, said device comprising :

- 1) A head, being means to absorb impact.
- 2) A ram, being means to transmit impact to the jammed bullet, and being shaped so as to fit into the gun barrel.
- 3) A shaft being means to rigidly connect said head to said ram.
- 4) A collar being axially disposed on said shaft, said collar being free to be translated axially along said shaft and being means to axially align said shaft and said ram in the gun barrel.

Said head is rigidly and axially joined to one end of said shaft and said ram is rigidly and axially joined to the other end of said shaft.

2. The device of claim 1, said ram having a taper, said taper being means to prevent said ram from jamming in the gun barrel if said ram is distorted by impact.

3. The device of claim 1, said ram having an indentation, said indentation being means to engage and realign the jammed bullet when it comes in contact with said ram.